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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,242	09/03/2004	Jaideva C. Goswami	20.2926	5241
23718	7590	03/08/2006	EXAMINER	
SCHLUMBERGER OILFIELD SERVICES 200 GILLINGHAM LANE MD 200-9 SUGAR LAND, TX 77478			MCELHENY JR, DONALD E	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary	Application No. 10/711,242	Applicant(s) GOSWAMI ET AL.	
	Examiner Donald E. McElheny, Jr.	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/24/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/07/05:07/11/05</u> . | 6) <input type="checkbox"/> Other: ____. |

1. New drawings were received on 01/24/05. These drawings, and the original drawings, are objected to for reasons given below:

Those figures representative of the prior art, such as Figure 1, and apparently others, should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Figure 12 apparently is the last figure on the last drawing sheet, but is not labeled nor found elsewhere in the sheets.

The drawings are also objected to under 37 CFR 1.83(a) and 1.84. The drawings must show every feature of the invention specified in the claims. Therefore, the structural features and method steps characterizing the novel features of the invention must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Applicant is reminded that each and every claim element must be found in the drawings as required by 37 CFR 1.83(a), 1.84(h) & (j), and MPEP 608.02(d), and also the drawings and specification must describe, show and correspond for all components shown or discussed as required by 37 CFR 1.84(p). The drawings must show every feature of the invention specified in the claims, including not only claimed structure but also all method, algorithm and program related steps within some form of flowchart(s). For mathematical related algorithms see 37 CFR 1.84(d). If a lack of correspondence between the claims and figures is merely a matter of applicant using different language in the claims than that found in the figures, then the intended correlation, basis and support for their equivalence must be shown for where claim elements exist within the

figures and written disclosure. Some minimal flowchart diagram is required to depict the gist of the method claims and their essential inventive features.

Furthermore, the various depicted items must be referenced by reference numerals and corresponding numerals occur in the written description where the shown subject matter is described in the written specification. All material items depicted in the figures must be referenced in the written specification, and vice-versa.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The current title reads merely on an abstract idea.

3. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because the paragraph numbering used throughout the written application is improper, and also because some characters (especially those used in formulas/equations) are too small and illegible. A proper legible font size must be used throughout the written specification and drawings. See MPEP 608.01 and 37 CFR 1.52, particularly 1.52(b)(6) and MPEP 608.01(q).

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1- 11, 15-20, 23, and 24-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims do not meet the requirements as set forth in the recently updated "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" ("Guidelines"), see United States Patent and Trademark Office OG Notices: 22 November 2005.

The claims are directed either explicitly only to an abstract idea, or verbal description of a mathematical algorithm, or to a computer running an abstract idea algorithm process, and lack any requisite real world practical utility with either a physical transformation, or useful, tangible and concrete results, and thus are non-statutory under the Guidelines. Note that under current updated Office policy even when a physical input sensor supplies the real-world input data, or a computer system is recited, such does not place the claimed invention in a safe harbor of statutory subject matter, but the claimed algorithmic based invention is analyzed under the Guidelines to determine if it meets the required statutory subject matter conditions set forth therein.

Note those claims explicitly claiming "modeling", or "mapping" or related features image concepts (e.g. claim 20, etc.), are all still non-statutory as they remain directed to internal computer data processing and no external real world practical utility. This is especially so as applicants' own specification discloses such concepts as embodiments and/or equivalents thereto involving internal data processing modeling per se.

Claims including limitations/features directed to transmitting are deemed directed to statutory subject matter assuming the purpose and novelty involve data

transformations for the purpose of transmitting data results in a different manner. If not, then mere transfer of data from one position to another may also be deemed to involve mere data processing concepts of non-statutory nature. Applicants should state for the record the intent of and basis of their claimed inventive feature(s) for their statutory invention basis to assure no question remains of such basis and meeting of 35 U.S.C. 101 requirements.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 7, 8, 10-15, 21, 22, and 24-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims (e.g., such as 7 and 8, etc., and their dependent claims) reciting the phrase "are representative of", this renders such claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. They also raise the question of whether the limitation negates that the measurements are actual real world measurements anymore, and whether they are measurements at all of real world sensors and real world physical processes; which matters are important in evaluation of basis and intent for statutory subject matter (as further addressed *supra*). See MPEP § 2173.05(d).

Regarding claims (e.g., such as 10, 11, 14, etc., and their dependent claims) reciting any of the phrases, or variations thereof, "capable of being", "capable of being represented", "characterized by", "can each be characterized by", etc., these phrases

render such claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See above remarks.

8. No attempt at this time is made to reject the claims over the prior art in lieu of the improper and grossly indefinite claims. Prior art is cited which appears highly pertinent to the disclosed invention as best as can be made from the claimed features. Note de Kok (6,829,538 B2) and Matteucci et al. (6,801,473 B2) appear to meet the non-well logging embodiments.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald McElheny, Jr. whose telephone number is 571-272-2218. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

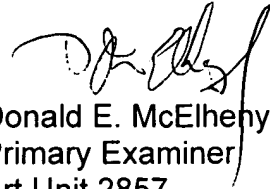
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoff Marc, can be reached on weekdays at telephone number 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "D. McElheny, Jr.", with a stylized flourish at the end.

Donald E. McElheny, Jr.
Primary Examiner
Art Unit 2857